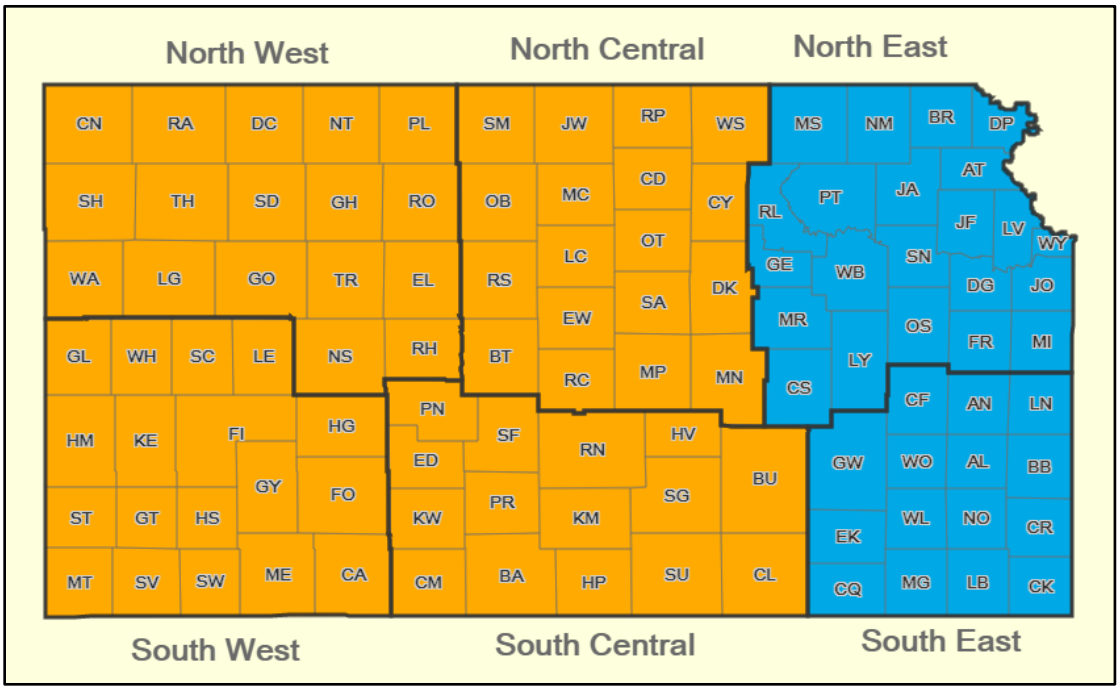
# Kansas West Nile Virus Weekly Surveillance and Transmission Risk Report

Week Ending October 12, 2019 (MMWR Week 41)




## RISK LEVEL

Minimal Low Moderate High

| Key to West Nile virus Risk Levels in Kansas - 2018 | | |
|---|---|---|
| **Risk** | **What it Means** | **What You Can Do** |
| Minimal | Mosquito surveillance is conducted mid-May – mid-October however infection with WNV is unlikely. This does not mean the risk is zero. | **To Prepare:**<br>Know your risk – check regularly at http://www.kdheks.gov/epi/arboviral_disease.htm<br>Mosquito-Proof Your Home:<br>• Keep screens on windows and doors in good repair.<br>• Use air conditioning if you have it.<br>• DRAIN - Reduce number of mosquitoes around your home by emptying standing water from flowerpots, gutters, buckets, pool covers, pet water dishes, discarded tires, and birdbaths on a regular basis. |
| Low | The mosquitoes that carry WNV is present in small numbers. There is a low probability of being bitten by an infected mosquito. | **To Prevent:**<br>• Wear mosquito repellent between dusk to dawn<br>• Wear long sleeves and long pants from dusk to dawn<br>• Use mosquito netting on baby carriages and playpens |
| Moderate | There is a moderate probability of being bitten by a WNV mosquito. | **To Prevent: add to previous level**<br>• Wear mosquito repellent<br>• Wear long sleeves and long pants when weather permits<br>• Use mosquito netting on baby carriages and playpens<br>• Dump standing water twice weekly |
| High | This week has been identified as 'high risk' of being bitten by a WNV mosquito based on: high number of WNV mosquitoes identified and high number of historical human cases of WNV. | **To Prevent: add to previous level**<br>• People over 50 or those who are immune compromised may consider adjusting outdoor activity to avoid peak mosquito hours (from dusk to dawn). |

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**Highlights this week:**

- **Northwest:** Moderate risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and decrease in historical human cases.
- **North Central:** Moderate risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and decrease in historical human cases.
- **Northeast:** Low risk due to a decrease in the number of *Culex* species mosquitoes trapped this week and decrease in two-week average temperatures.
- **Southwest:** Moderate risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week.
- **South Central**: Moderate risk due to a significant increase in the number of *Culex* species mosquitoes trapped this week and decrease in historical human cases.
- **Southeast**: Low risk due to a decrease in the number of *Culex* species mosquitoes trapped this week and decrease in two-week average temperatures.

**Methods for Risk Assessment**

We utilize three factors in our risk assessment model; temperature, mosquito surveillance data, and human cases of WNV. Each factor has set benchmarks and each benchmark is assigned a value. The values from these three categories are averaged. The average rating is assigned a WNV risk level for each week.

- High-risk environmental conditions include above-normal temperatures with or without above-normal rainfall. We use the average daily temperature during the prior 2 weeks as our benchmark.
- Culex species of mosquitoes serve as the main source of WNV transmission to people and horses. Relative abundance of *Culex* species mosquitoes compared to the same week in the previous year and the number of *Culex* species mosquitoes are evaluated each week. Greater than 40 *Culex* species mosquitoes collected in a week increases this factor to its maximum value.
- Number of human cases of WNV each week based on the average number of cases in the previous five years.

For WNV human case counts updated weekly, visit http://www.kdheks.gov/epi/case_reports_by_county.htm. For more information on arboviral disease surveillance in Kansas, visit our website at; http://www.kdheks.gov/epi/arboviral_disease.htm or contact the Kansas Department of Health and Environment's Infectious Disease Epidemiology and Response section at 1-877-427-7317 or e-mail at kdhe.epihotline@ks.gov.

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